

Abstract

The thermoactive wall and ceiling element is installed in walls of newly built and old buildings and serves for its heating and cooling. It consists of a closed casing (2) which for intermediately storing heat comprises a phase change material (3) which melts when accommodating heat and reversely delivers latent heat to the surrounding on solidification. A lamellar design (8) with sound-absorbing material (4) therebetween is hung on this casing in a thermally separated manner by way of a heat-insulating material. At the bottom the lamellar design (9) is closed by a perforated ceiling sheet [metal] (plate) (5) in a heat-conducting manner, and this sheet metal (plate) forms the viewed ceiling of the room. The lamellar design encloses a heating and cooling pipe which is outwardly formed by the lamellar design as one piece or is connected to it in a heat-conducting manner. A displaceable heat-conducting heat contact body (24) is installed in the cavity (23) between the lamellar design (8) and the casing (2), and this body with all its parts creates a heat connection between the casing (2) and the lamellar design (8). An air gap (27) to the casing (2) arises, depending on its position, so that a thermal separation is achieved by it.